
Selection tables for connections, housing size, current and cross-section.

Applicant: R. STAHL Schaltgeräte GmbH
Am Bahnhof 30
74638 Waldenburg (Württ.)
Germany

Electrical Apparatus: Terminal box, types 8146/1***-**. and 8146/2***-**.

Notes

- 1) Each incoming conductor and each internal connection wire is counted as a conductor.
Bridges and earthing conductors are not counted.
- 2) additional conductors optional
- 3) to be specified by the manufacturer (including temperature rise test)
- 4) When applying the values of this table simultaneous factors or load factors to IEC 439 may be considered. Mixed equipment with circuits of different cross sections and currents is possible if the various values of the table are applied proportionally:

Example:

(general)

cross section/mm ²	current/A	number of conductors	utilization
2,5	16	10 (of 30)	= 33 %
16	50	12 (of 48)	= 25 %
25	63	36 (of 90)	= 40 %
		Total	= <u>98 %</u> < 100 %

Fitting of terminal boxes Type 8146/1031

Max. number of conductors ¹⁾ depending on cross section and the permissible continuous current:

current / A	cross section / mm ²			
	1,5	2,5	4	
3				2)
6				
10	42			
16	14	28	108	4)
20	6	16	31	
25		7	17	
35			5	
50				3)
	14	14	14	
	max. number of terminals depending of the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals			

Fitting of terminal boxes Type 8146/1041

Max. number of conductors ¹⁾ depending on cross section and the permissible continuous current:

current / A	cross section / mm ²						
	1,5	2,5	4	6	10	16	
3							2)
6							
10	44						
16	15	29	114				
20	6	17	33				
25		8	18	36			
35			5	14	35		4)
50				2	11	29	
63					3	13	
80						5	
100							3)
	28	28	28	10	10	8	
	max. number of terminals depending of the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals						

Fitting of terminal boxes Type 8146/1241

Max. number of conductors ¹⁾ depending on cross section and the permissible continuous current:

current / A	cross section / mm ²								
	1,5	2,5	4	6	10	16	25	35	
3									2)
6									
10	45								
16	15	29	116						
20	6	17	33						
25		8	19	36					
35			5	14	35				4)
50				2	11	29			
63					3	13	48		
80						5	15	54	
100							6	14	3)
125								5	
150									
	56	56	33	20	10	8	6	5	
	max. number of terminals depending of the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals								

Fitting of terminal boxes Type 8146/1242

Max. number of conductors ¹⁾ depending on cross section and the permissible continuous current:

current / A	cross section / mm ²								
	1,5	2,5	4	6	10	16	25	35	
3									2)
6									
10	55								
16	19	37	143						
20	8	21	41						
25		10	23	45					
35			7	17	44				
50				2	14	36			
63					4	17	60		
80						6	19	67	
100							8	17	4)
125								7	
160									3)
	56	56	33	20	10	8	6	5	
max. number of terminals depending of the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals									

Fitting of terminal boxes Type 8146/1051

Max. number of conductors ¹⁾ depending on cross section and the permissible continuous current:

current / A	cross section / mm ²						
	1,5	2,5	4	6	10	16	
3							2)
6							
10	50						
16	17	33	129				
20	7	19	37				
25		9	21	41			
35			6	16	39		
50				2	13	33	4)
63					4	15	
80						5	
100							3)
	46	46	46	17	17	13	
	max. number of terminals depending of the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals						

Fitting of terminal boxes Type 8146/1052

Max. number of conductors ¹⁾ depending on cross section and the permissible continuous current:

current / A	cross section / mm ²						
	1,5	2,5	4	6	10	16	
3							2)
6							
10	61						
16	21	41	159				
20	8	24	46				
25		11	26	50			
35			7	19	49		
50				2	16	40	4)
63					5	18	
80						7	
100							3)
	46	46	46	17	17	13	
	max. number of terminals depending of the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals						

Fitting of terminal boxes Type 8146/1061

Max. number of conductors ¹⁾ depending on cross section and the permissible continuous current:

current / A	cross section / mm ²								
	1,5	2,5	4	6	10	16	25	35	
3									2)
6									
10	53								
16	18	35	137						
20	7	20	39						
25		9	22	43					
35			6	17	42				
50				2	13	35			
63					4	16	57		
80						6	18	64	
100							7	17	
125								6	
160									3)
	92	92	66	34	24	19	11	9	
	max. number of terminals depending of the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals								

Fitting of terminal boxes Type 8146/1062

Max. number of conductors ¹⁾ depending on cross section and the permissible continuous current:

current / A	cross section / mm ²								
	1,5	2,5	4	6	10	16	25	35	
3									2)
6									
10	64								
16	22	42	166						
20	9	25	48						
25		11	27	52					
35			8	20	51				
50				3	16	42			
63					5	19	69		
80						7	21	78	
100							9	20	
125								8	
160									3)
	92	92	66	34	24	19	11	9	
	max. number of terminals depending of the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals								

Fitting of terminal boxes Type 8146/1071 and Type 8146/1S71

Max. number of conductors ¹⁾ depending on cross section and the permissible continuous current:

current / A	cross section / mm ²								
	1,5	2,5	4	6	10	16	25	35	
3									2)
6									
10	55								
16	19	36	142						
20	7	21	41						
25		10	23	45					
35			6	17	44				
50				2	14	36			
63					4	17	60		
80						6	18	67	
100							8	17	4)
125								7	
160									3)
	138	138	104	51	38	30	22	9	
	max. number of terminals depending of the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals								

Fitting of terminal boxes Type 8146/1072 and Type 8146/1S72

Max. number of conductors ¹⁾ depending on cross section and the permissible continuous current:

current / A	cross section / mm ²										
	1,5	2,5	4	6	10	16	25	35	50	70	
3											2)
6											
10	66										
16	22	44	170								
20	9	25	49								
25		12	28	54							
35			8	21	52						
50				3	17	43					
63					5	20	71				
80						7	22	80			
100							9	21			
125								8	21		
160									7	19	
200										6	
225										2	
250											3)
	138	138	104	51	38	30	22	9	6	6	
	max. number of terminals depending of the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals										

Fitting of terminal boxes Type 8146/1073 and Type 8146/1S73

Max. number of conductors ¹⁾ depending on cross section and the permissible continuous current:

current / A	cross section / mm ²										
	1,5	2,5	4	6	10	16	25	35	50	70	
3											2)
6											
10	71										
16	24	47	184								
20	10	27	53								
25		13	30	58							
35			8	22	56						
50				3	18	47					
63					6	21	77				
80						8	24	86			
100							10	22			
125								9	23		
160									8	20	
200										7	
225										2	
250											3)
	138	138	104	51	38	30	22	9	6	6	
	max. number of terminals depending of the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals										

Fitting of terminal boxes Type 8146/1075 and Type 8146/1S75

Max. number of conductors ¹⁾ depending on cross section and the permissible continuous current:

current / A	cross section / mm ²										
	1,5	2,5	4	6	10	16	25	35	50	70	
3											2)
6											
10	82										
16	28	54	212								
20	11	32	61								
25		15	35	67							
35			10	26	65						
50				3	21	54					
63					7	25	89				
80						9	28	99			
100							12	26			
125								10	26		
160									9	23	
200										8	
225										3	
250											
	138	138	104	51	38	30	22	9	6	6	3)
	max. number of terminals depending of the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals										

Fitting of terminal boxes Type 8146/1081

Max. number of conductors ¹⁾ depending on cross section and the permissible continuous current:

current / A	cross section / mm ²								
	1,5	2,5	4	6	10	16	25	35	
3									2)
6									
10	74								
16	25	49	192						
20	10	29	55						
25		13	31	61					
35			9	23	59				
50				3	19	49			
63					6	22	80		
80						8	25	90	
100							10	23	
125								9	
160									3)
	312	312	208	117	76	60	50	20	
	max. number of terminals depending of the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals								

Fitting of terminal boxes Type 8146/1082

Max. number of conductors ¹⁾ depending on cross section and the permissible continuous current:

current / A	cross section / mm ²											
	1,5	2,5	4	6	10	16	25	35	50	70		
3												2)
6												
10	86											
16	29	57	221									
20	12	33	64									
25		15	36	70								
35			10	27	68							
50				4	22	56						
63					7	26	93					
80						10	29	104				
100							12	27				
125								11	28			
160									9	24	4)	
200										8		
225										3		
250											3)	
	312	312	208	117	76	60	50	20	14	14		
	max. number of terminals depending of the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals											

Fitting of terminal boxes Type 8146/1083

Max. number of conductors ¹⁾ depending on cross section and the permissible continuous current:

current / A	cross section / mm ²										
	1,5	2,5	4	6	10	16	25	35	50	70	
3											2)
6											
10	91										
16	31	60	235								
20	13	35	68								
25		16	38	74							
35			11	29	72						
50				4	23	60					
63					8	28	99				
80						10	31	111			
100							13	29			
125								11	29		
160									10	26	
200										9	
225										3	
250											
	312	312	208	117	76	60	50	20	14	14	3)
	max. number of terminals depending of the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals										

Fitting of terminal boxes Type 8146/1084

Max. number of conductors ¹⁾ depending on cross section and the permissible continuous current:

current / A	cross section / mm ²										
	1,5	2,5	4	6	10	16	25	35	50	70	
3											2)
6											
10	97										
16	33	64	251								
20	14	37	73								
25		18	41	79							
35			12	31	77						
50				4	25	64					
63					8	29	105				
80						11	33	118			
100							14	31			
125								12	31		
160									11	27	
200										10	
225										3	
250											
	312	312	208	117	76	60	50	20	14	14	3)
	max. number of terminals depending of the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals										

Fitting of terminal boxes Type 8146/1085

Max. number of conductors ¹⁾ depending on cross section and the permissible continuous current:

current / A	cross section / mm ²										
	1,5	2,5	4	6	10	16	25	35	50	70	
3											2)
6											
10	102										
16	35	68	265								
20	14	40	77								
25		19	43	84							
35			12	33	81						
50				4	26	67					
63					9	31	111				
80						12	35	124			
100							15	33			
125								13	33		
160									11	29	
200										10	
225										4	
250											
	312	312	208	117	76	60	50	20	14	14	3)
	max. number of terminals depending of the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals										

Fitting of terminal boxes Type 8146/1086

Max. number of conductors ¹⁾ depending on cross section and the permissible continuous current:

current / A	cross section / mm ²											
	1,5	2,5	4	6	10	16	25	35	50	70		
3												2)
6												
10	114											
16	39	76	294									
20	16	44	85									
25		21	48	93								
35			14	36	90							
50				5	29	75						
63					10	35	123					
80						13	38	138				
100							16	36				
125								14	37			
160									12	32		
200										11	4)	
225										4		
250											3)	
	312	312	208	117	76	60	50	20	14	14		
	max. number of terminals depending of the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals											

Fitting of terminal boxes Type 8146/1091

Max. number of conductors ¹⁾ depending on cross section and the permissible continuous current:

current / A	cross section / mm ²								
	1,5	2,5	4	6	10	16	25	35	
3									2)
6									
10	86								
16	29	57	222						
20	12	33	64						
25		16	36	70					
35			10	27	68				
50				4	22	56			
63					7	26	93		
80						10	29	104	4)
100							12	27	
125								11	
160									3)
	676	676	468	273	190	128	106	60	
	max. number of terminals depending of the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals								

Fitting of terminal boxes Type 8146/1092

Max. number of conductors ¹⁾ depending on cross section and the permissible continuous current:

current A	cross section / mm ²																	
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300		
3																		2)
6																		
10	97																	
16	33	64	250															
20	13	37	72															
25		18	41	79														
35			12	31	77													
50				4	25	63												
63					8	29	105											
80						11	33	117										
100							14	31										
125								12	31									
160									10	27								
200										10	24	74						
225										3	13	29						
250											7	17	36					
315												3	10	22				
400														4	15	44	4)	
500															2	8		
																	3)	
	676	676	468	273	190	128	106	60	29	29	8	8	6	6	6	6		

max. number of terminals depending of the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals

Fitting of terminal boxes Type 8146/1093

Max. number of conductors ¹⁾ depending on cross section and the permissible continuous current:

current A	cross section / mm ²																	
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300		
3																		2)
6																		
10	10																	
16	35	68	26															
20	14	39	76															
25		18	43	83														
35			12	32	81													
50				4	26	67												
63					9	31	11											
80						12	34	12										
100							15	32										
125								13	33									
160									11	29								
200										10	25	78						
225										4	14	30						
250											7	18	38					
315												4	11	23				
400														5	16	46	4)	
500															2	9		
																	3)	
	67	67	46	27	19	12	10	60	29	29	8	8	6	6	6	6		
	6	6	8	3	0	8	6											
	max. number of terminals depending of the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																	

Fitting of terminal boxes Type 8146/1095

Max. number of conductors ¹⁾ depending on cross section and the permissible continuous current:

current A	cross section / mm ²																	
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300		
3																		2)
6																		
10	11																	
16	38	75	29															
20	16	44	84															
25		20	48	92														
35			14	36	89													
50				5	29	74												
63					10	34	12											
80						13	38	13										
100							16	36										
125								14	36									
160									12	32								
200										11	28	86						
225										4	16	33						
250											8	20	43					
315												4	12	25				
400														5	17	51	4)	
500															2	10		
																	3)	
	67	67	46	27	19	12	10	60	29	29	8	8	6	6	6	6		
	6	6	8	3	0	8	6											
	max. number of terminals depending of the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																	